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EXAMINER
SHAW, PELING ANDY

ART UNIT	PAPER NUMBER
2144	

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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/024,408	JEFFREY DAWSON
	Examiner	Art Unit	
	Peling A. Shaw	2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>03 December 2004</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>24 June 2002</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>04/22/03</u>.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____ .

DETAILED ACTION

Priority

1.   This application has no priority claim made. The effective filing date is

12/17/2001.

Abstract

2.   The abstract is objected to because of the following informalities:

    a. Line 2-3, "..., in a network, in a network, ..." should be "..., in a network, ...".

Specification Objections

3.   The title of the invention is not descriptive. A new title is required that is clearly

indicative of the invention to which the claims are directed, e.g. "Network Path

Identification and Display".

4.   The specification is objected due to:

    a. Page 21, line 3, the reference of "bar 508" is not found in Fig. 8.

The example is illustrative only and the applicant is requested to ensure that the

other instances are checked and corrected.

Claim Rejections – 35 USC § 112, 2nd Paragraph

5.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

Claims 23 and 24 are rejected under 35 U.S.C. 112, second paragraph as following:

    a. Claim 23 recites the limitation of " the geometric shapes " in line 2-3. There is

       insufficient antecedent basis for this limitation in the claim.

    b. Claim 24 recites the limitation of " the highlighted geometric shape" in line 2.

       There is insufficient antecedent basis for this limitation in the claim.

For the purpose of applying art, claims 23 and 24 are read as "The method of claim

20 ..." respectively.

Claim Rejections – 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-6 and 8-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Ahearn, et al., (U.S. Patent Number 5,926,463) hereinafter referred as Ahearn, in view

of Henderson, et al., (U.S. Patent Number 5,726,979), hereinafter referred as

Henderson.

      a. Regarding claims 1 and 11, Ahearn shows a method comprising: in a

network, collecting data about a packet passing from a source system to a

destination system (column 20, line 64-column 21, line 7: collect information

to determine the critical paths from one workstation to another by sending

out packets); generating a report using HTML (column 10, line 45-48: The

Router Watch means allows the user to generate HTML (Hyper Text

Markup Language) reports to summarize the changes that have occurred

over time); displaying a view based upon the collected data (column 6, line

31-33: The IP view shows all the devices and links between the particular

workstation 1a and the particular server 13a). Ahearn does not show

generating a markup language graphical file based on the collected data;

displaying the markup language graphics file; and in which displaying

comprises showing an image represented the markup language graphics file on browser software.

b. Henderson shows generating a markup language graphical file based on the collected data (column 11, line 18-21: Hyper-Text Markup Language translator 141 can convert the database procedures interface into a well-known Hyper-Text Markup Language (HTML) interface); displaying the markup language graphics file; and in which displaying comprises showing an image represented the markup language graphics file on browser software (column 13, line 31-34: The HTML translator 141 preferably has a browser (e.g. the well-known Netscape Browser) for providing a GUI for a low-end user.) in an analogous art for the purpose of providing a remote user web access to the management information usually accessed in a local GUI user interface.

c. It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to use Henderson's HTML translator on the data collected per Ahearn and display the translated HTML on a browser.

d. The modification would have been obvious because one of ordinary skill in the art would have been motivated to modify Henderson's HTML translator as used in the telecommunication network management to work on the data collected per Ahearn in the data network management for the generating and displaying in HTML format on a browser.

e. Regarding claim 2, Ahearn shows the method of claim 1 in which collecting comprises: tracing routes from the source system to the destination system (column 20, line 64-67: collect information to determine the critical paths from one workstation to another); and for each of the routes, storing a node identification, a hop time, and a travel time from the source system to an intermediate node (column 21, line 1-20: using ICMP to collect and compute data).

f. Regarding claim 3, Ahearn shows the method of claim 2 in which the node identification comprises a node name (column 7, line 58-60: The user is able to give each router, network, and cloud a logical name. The application provides reasonable defaults for all logical names.).

g. Regarding claim 4, Ahearn shows the method of claim 2 in which the node identification comprises an Internet Protocol (IP) address (column 21, line 1-20: using ICMP to collect and compute data).

h. Regarding claim 5, Ahearn shows the method of claim 2 in which generating comprises: determining a number of nodes in each of the routes (column 21, line 1-10: using ICMP to collect and compute data); assigning coordinates to each of the systems in each of the routes (column 3, line 18-22: Also the relative positioning, and the connections between elements in the graphic view represent the connectivity relationships of the actual elements in the actual network.); and storing the coordinates and associated node identification, hop time, and travel time from source system to each of

the systems in each routes (column 21, line 1-20: using ICMP to collect and compute data). Ahearn does not show storing in a markup language file. Per item b, c and d, Henderson shows the data can be converted and stored in a markup language file per a modification by a person of ordinary skill under the motivation of providing a remote user web access to the management information usually accessed in a local GUI user interface.

i.   Regarding claim 6, Ahearn does not show the method of claim 5 in which the markup language comprises Hypertext Markup Language (HTML). However with Henderson, it is shown the markup language is a Hypertext Markup Language (HTML) as per description in item b, c and d.

j.   Regarding claim 8, Ahearn shows the method of claim 5 in which each of the systems on each of the routes is positioned on an imaginary line emanating from a center of a geometric structure (column 22, line 30-53: a device is chosen to be at the center of the network; Fig. 12).

k.   Regarding claim 9, Ahearn shows the method of claim 8 in which the geometric structure comprises a circle (column 22, line 12-13: Each device on the network is represented as a particular shape depending on the type of device; column 23, line 13-15: The submap takes on the size of a single device, but with a unique shape; column 22, line 23-25: Circular ring connections such as Token Ring and FDDI are drawn as circles; Fig. 1 and 8, 13).

l. Regarding claim 10, Ahearn shows the method of claim 8 in which the geometric structure comprises a square (Fig. 8, item 1; Fig. 11).

m. Regarding claim 12, Ahearn shows the method of claim 11 in which the image includes geometric shapes representing nodes in each route (Fig. 8, items 1, 5, 9, 11, and 13).

n. Regarding claim 13, Ahearn shows the method of claim 12 in which a color of the displayed shapes represents a network (column 23, line 41-43: all these subsets of the network simultaneously, distinguished by color and shade).

o. Regarding claim 14, Ahearn shows the method claim 12 in which a color of the displayed shapes represents a potential timing problem (column 4, line 27-33: maintain a view of network showing the timers are out-of-synch; column 8, line 33-35: color-coded status of each object).

p. Regarding claim 15, Ahearn shows the method claim 12 further comprising displaying a node identification and route timing data when an element of displayed file is highlighted by a user (column 21, line 55-56: MIB support is required to return the traceroute information to the management station; line 58-61: When the tracestate object is set by a management station.).

q. Regarding claim 16, Ahearn shows the method of claim 1 further comprising displaying a time travel histogram a highlighted displayed file (column 16, line 42-44: Displays of the historic information can be of a node graph).

Together Ahearn and Henderson disclosed all limitations of claims 1-6 and 8-16.

Claims 1-6 and 8-16 are rejected under 35 U.S.C. 103(a).

7.   Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ahearn,

et al., (U.S. Patent Number 5,926,463) hereinafter referred as Ahearn and Henderson,

et al., (U.S. Patent Number 5,726,979), hereinafter referred as Henderson, as applied to

claim 5 above, and further in view of Britton, et al., (U.S. Patent Number 6,535,896),

hereinafter referred as Britton.

      a. Regarding claim 7. Ahearn and Henderson do not show the method of claim

          5 in which the markup language comprises Extensible Markup Language

          (XML).

      b. Britton shows the method of claim 5 in which the markup language

          comprises Extensible Markup Language (XML) (column 2, line 65-column 3,

          line 1-6: XML is a prevalent markup language; column 3, line 18-20: XML is

          facilitated to accommodate Web pages written in HTML) in an analogous art

          for the purpose of tailoring the web page content in XML for displaying

          within pervasive computing devices.

      c. It would have been obvious to a person of ordinary skill in the art at the time

          of the invention was made to first translate per Henderson the data collected

          per Ahearn into HTML, then convert per Britton in XML for display..

      d. The modification would have been obvious because one of ordinary skill in

          the art would have been motivated to modify a Henderson's HTML

          translator used in the telecommunication network management to become a

XML translator on the data collected per Ahearn in the data network

management for generating and displaying the data in XML format.

Together Ahearn, Henderson and Britton disclosed all limitations of claim 7. Claim 7

is rejected under 35 U.S.C. 103(a).

8.   Claims 17-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Ahearn, et al., (U.S. Patent Number 5,926,463) hereinafter referred as Ahearn, in view

of Henderson, et al., (U.S. Patent Number 5,726,979), hereinafter referred as

Henderson.

      a. Regarding claims 17, 19, 25 and 26, Ahearn shows a method comprising: in

a network, tracing routes from a source system to the destination systems

(column 20, line 64-67: collect information to determine the critical paths

from one workstation to another); for each of the routes, storing data

representing a node identification, a hop time, and a travel time from the

source system to an intermediate node (column 21, line 1-20: using ICMP to

collect and compute data); generating a report using HTML (column 10, line

45-48: The Router Watch means allows the user to generate HTML (Hyper

Text Markup Language) reports to summarize the changes that have

occurred over time); displaying a view based upon the collected data

(column 6, line 31-33: The IP view shows all the devices and links between

the particular workstation 1a and the particular server 13a). Ahearn does not

show generating an interactive markup language graphics file for the data;

displaying the interactive language graphics file; in which displaying

comprises viewing an image represented by the markup language graphics

file on browser software; in which the data is stored in a remote computer

system; in which the interactive markup language graphics file is displayed

on a remote system.

b. Henderson shows generating an interactive markup language graphics file

for the data (column 11, line 18-21: Hyper-Text Markup Language translator

141 can convert the database procedures interface into a well-known

Hyper-Text Markup Language (HTML) interface); displaying the interactive

language graphics file; in which displaying comprises viewing an image

represented by the markup language graphics file on browser software

(column 13, line 31-34: The HTML translator 141 preferably has a browser

(e.g. the well-known Netscape Browser) for providing a GUI for a low-end

user.); in which the data is stored in a remote computer system; in which the

interactive markup language graphics file is displayed on a remote system

(column 11, line 18-24: Using the HTML interface 144 remote, low-cost

workstations, such as workstation 143, can gain at least limited access to

data relating to the managed network 150.); in an analogous art for the

purpose of providing a remote user web access to the management

information usually accessed in a local GUI user interface.

c. It would have been obvious to a person of ordinary skill in the art at the time

of the invention was made to use Henderson's HTML translator on the

stored data per Ahearn and display the translated HTML on a browser; the

data can be stored remotely from the access user; the display can be on a

remote access user on a browser.

d. The modification would have been obvious because one of ordinary skill in

the art would have been motivated to modify Henderson's HTML translator

used in the telecommunication network management to work on the stored

data per Ahearn in the data network management for generating and

displaying the data in HTML format on a browser, either locally or remotely.

e. Regarding claim 18, Ahearn shows the method of claim 17 in which

generating comprises: determining a number of systems in each of the

routes (column 21, line 1-20: using ICMP to collect and compute data);

assigning coordinates to each of the systems in each of the routes (column

3, line 18-22: Also the relative positioning, and the connections between

elements in the graphic view represent the connectivity relationships of the

actual elements in the actual network.); and storing the coordinates and

associated node identification, hop time, and travel time from source system

to each the systems in each of the routes (column 21, line 1-20: using ICMP

to collect and compute data). Ahearn does not show storing in a markup

language file. Per item b, c and d, Henderson shows the stored data can be

converted and stored in a markup language file per a modification by a

person of ordinary skill under the motivation of providing a remote user web

access to the management information usually accessed in a local GUI user

interface.

f. Regarding claim 20, Ahearn shows the method of claim 19 in which the image includes geometric shapes representing systems in each route (Fig. 8, items 1, 5, 9, 11, and 13).

g. Regarding claim 21, Ahearn shows the method of claim 20 in which a color of the geometric shapes represents a network (column 23, line 41-43: all these subsets of the network simultaneously, distinguished by color and shade).

h. Regarding claim 22, Ahearn shows the method of claim 20 in which a color of the geometric shapes represents a potential timing problem (column 4, line 27-33: maintain a view of network showing the timers are out-of-synch; column 8: color-coded status of each object).

i. Regarding claim 23, Ahearn shows the method claim 19 further comprising displaying a node identification and route timing data when any of the geometric shapes is highlighted by a cursor on an input/output device (column 21, line 55-56: MIB support is required to return the traceroute information to the management station; line 58-61: When the tracestate object is set by a management station.).

j. Regarding claim 24, Ahearn shows the method of claim 19 further comprising displaying a time travel histogram of the highlighted geometric shape (column 16, line 42-44: Displays of the historic information can be of a node graph).

Together Ahearn and Henderson disclosed all limitations of claims 17-26. Claims 17-26 are rejected under 35 U.S.C. 103(a).

9.   Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ahearn, et al., (U.S. Patent Number 5,926,463) hereinafter referred as Ahearn, in view of Henderson, et al., (U.S. Patent Number 5,726,979), hereinafter referred as Henderson.

a. Regarding claim 27, Ahearn shows A computer program stored a computer readable-medium, the computer program comprising instructions (abstract, line 4-8: The present invention determines from this combined database is the status of the links, switches and routers, as well as uses software tools to determine the status of the network and its devices.) that cause a computer to: collect data in a network from a source system to destination systems (column 20, line 64-column 21, line 7: collect information to determine the critical paths from one workstation to another by sending out packets); generating a report using HTML (column 10, line 45-48: The Router Watch means allows the user to generate HTML (Hyper Text Markup Language) reports to summarize the changes that have occurred over time); displaying a view based upon the collected data (column 6, line 31-33: The IP view shows all the devices and links between the particular workstation 1a and the particular server 13a). Ahearn does not show generating a markup language graphics file for collected data; and displaying the markup language graphics file.

b. Henderson shows generating a markup language graphics file for collected

data (column 11, line 18-21: Hyper-Text Markup Language translator 141

can convert the database procedures interface into a well-known Hyper-

Text Markup Language (HTML) interface); and displaying the markup

language graphics file (column 13, line 31-34: The HTML translator 141

preferably has a browser (e.g. the well-known Netscape Browser) for

providing a GUI for a low-end user.) in an analogous art for the purpose of

providing a remote user web access to the management information usually

accessed in a local GUI user interface.

c. It would have been obvious to a person of ordinary skill in the art at the time

of the invention was made to use Henderson's HTML translator on the data

collected per Ahearn and display the translated HTML.

d. The modification would have been obvious because one of ordinary skill in

the art would have been motivated to modify Henderson's HTML translator

used in the telecommunication network management to work on the data

collected per Ahearn in the data network management for the generating

and displaying the data in HTML.

Together Ahearn and Henderson disclosed all limitations of claim 27. Claim 27 is

rejected under 35 U.S.C. 103(a).

10.   Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ahearn,

et al., (U.S. Patent Number 5,926,463) hereinafter referred as Ahearn, in view of

Henderson, et al., (U.S. Patent Number 5,726,979), hereinafter referred as Henderson.

a. Regarding claim 28, Ahearn shows a computer program stored on a

computer readable-medium, the computer program comprising instructions

(abstract, line 4-8: The present invention determines from this combined

database is the status of the links, switches and routers, as well as uses

software tools to determine the status of the network and its devices.) that

cause computer to: periodically trace network routes from a source system

to the destination systems (column 20, line 64-67: collect information to

determine the critical paths from one workstation to another; column 21, line

27-28: Permanent traceroutes can be scheduled to run periodically); for

each of the routes, store data representing a node identification, a hop time,

and a travel time from the source system to an intermediate node; (column

21, line 1-7: using ICMP to collect and compute data); generate a report

using HTML (column 10, line 45-48: The Router Watch means allows the

user to generate HTML (Hyper Text Markup Language) reports to

summarize the changes that have occurred over time); display a view based

upon the collected data (column 6, line 31-33: The IP view shows all the

devices and links between the particular workstation 1a and the particular

server 13a). Ahearn does not show generating an interactive markup

language graphics file for the data; and displaying the interactive markup

language graphics file.

b. Henderson shows generating an interactive markup language graphics file

for the data (column 11, line 18-21: Hyper-Text Markup Language translator

141 can convert the database procedures interface into a well-known

Hyper-Text Markup Language (HTML) interface); and displaying the

interactive language graphics file (column 13, line 31-34: The HTML

translator 141 preferably has a browser (e.g. the well-known Netscape

Browser) for providing a GUI for a low-end user.) in an analogous art for the

purpose of providing a remote user web access to the management

information usually accessed in a local GUI user interface.

c. It would have been obvious to a person of ordinary skill in the art at the time

of the invention was made to use Henderson's HTML translator on the

stored data per Ahearn and display the translated HTML.

d. The modification would have been obvious because one of ordinary skill in

the art would have been motivated to modify Henderson's HTML translator

used in the telecommunication network management to work on the stored

data per Adhearn in the data network management for generating and

displaying the data in HTML format.

Together Ahearn and Henderson disclosed all limitations of claim 28. Claim 28 is

rejected under 35 U.S.C. 103(a).

Conclusion

11.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to the enclosed PTO-892 for details.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peling A. Shaw whose telephone number is (571) 272-7968. The examiner can normally be reached on M-F 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William A. Cuchlinski can be reached on (571) 272-3925. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the statu9s of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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